REMARKS/ARGUMENTS

In this Amendment, Applicant has amended claims 4 and 14. Claims 1-3, 5, 7-13, 16-22 are canceled. Claims 4, 6, 14, and 15 have been resubmitted.

Claim 22 was rejected under 35 U.S.C. 102(b) as being anticipated by "Efficient Filtering of XML Documents for Selective Dissemination of Information", International Conference on Very Large Data Bases, 2000 by Altinel, Mehmet, and Franklin, Michael J. (hereinafter Altinel). Claims 1, 3-4, 6, 10, 11, 14-15, and 18-20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Altinel, further in view of "XML Path Language (XPATH) 2.0", W3C Working Draft 16 August 2002, by W3C (hereinafter W3C).

Applicant is not conceding that the subject matter encompassed by claims 1-22, prior to this Amendment is not patentable over the art cited by the Examiner. Claims 4 and 14 were amended and claims 1-3, 5, 7-13, 16-22 were cancelled in this Amendment solely to facilitate expeditious prosecution of the allowable subject matter noted by the Examiner. Applicant respectfully reserves the right to pursue claims, including the subject matter encompassed by claims 1-22, as presented prior to this Amendment and additional claims in one or more continuing applications.

Examiner Interview

Date: July 16, 2008 at 1 p.m. ET
Participants:

Camy Truong, Primary Examiner, USPTO
Michael Pham, Examiner, USPTO

Carl Giordano, for Shimokaji & Associates
Daniel Northfield, for Shimokaji & Associates

Topics of discussion:

1. Proposed amended claims were discussed.
2. Examiner Pham and Primary Examiner Truong stated that the proposed amended claims appeared to overcome the rejection under the prior art cited. Examiner Pham stated that he would do a search after the filed RCE and he agreed to make suggestions to put the claims in condition for allowance.

Amendments to the Claims

Claim 4 has been amended to recite:

"A computer-implemented document searching method", the amendment being supported, for example, at paragraph 0098;

"replacing an XPATH axis including an XPATH axis in a forward direction that is exemplified as an axis child, or a descendant in an XPath into a state transition", the amendment being supported, for example, at paragraph 0130;

"replacing an XPATH axis including an XPATH axis in an opposite direction that is exemplified as axis parent, ancestor in an XPath into a state transition", the amendment being supported, for example, at paragraph 0131;

"replacing an XPATH axis including an XPATH axis in a direction of a following-sibling, or a preceding-sibling in said XPath into a state transition", the amendment being supported, for example, at paragraph 0132;

"replacement of a predicate of an XPath into a state transition", the amendment being supported, for example, at paragraph 0133;

"replacement of a logical product (and) of a predicate of an XPath into a state transition", the amendment being supported, for example, at paragraph 0134;

"replacement of a logical add (or) of a predicate of an XPath into a state transition", the amendment being supported, for example, at paragraph 0135;

"replacement of a logical NOT (not) of a predicate of an XPath into a state transition", the amendment being supported, for example, at paragraph 0136;

"wherein said search state includes two states of said input query expression concurrently in a state transition", the amendment being supported, for example, at paragraph 0113;

"wherein every axis regarding sibling relationship among nodes can be included in the search condition for said query automaton", the amendment being supported, for example, at paragraph 0113;

"wherein the information obtained from said left node and information obtained from said lower node for a state transition is used concurrently", the amendment being supported, for example, at paragraph 0113;

"thereby using two inputs and a search state", the amendment being supported, for example, at paragraph 0120; and

"storing the output of the query automaton evaluator in a storage device" the amendment being supported, for example, at paragraph 0117.

Claim 14 has been amended to recite:

"A computer-implemented compiling method", the amendment being supported, for example, at paragraph 0098.

"replacing an XPATH axis including an XPATH axis in a forward direction that is exemplified as an axis child, or descendant in an XPath into a state transition", the amendment being supported, for example, at paragraph 0130.

"replacing an XPATH axis including an XPATH axis in an opposite direction that is exemplified as an axis parent, or ancestor in an XPath into a state transition" the amendment being supported, for example, at paragraph 0131.

"replacing an XPATH axis including an XPATH axis in a direction of a following-sibling or a preceding-sibling sibling in an XPath into a state transition", the amendment being supported, for example, at paragraph 0132.

"replacement of a predicate of an XPath into a state transition", the amendment being supported, for example, at paragraph 0133.

"replacement of a logical product (and) of a predicate of an XPath into a state transition", the amendment being supported, for example, at paragraph 0134.

"replacement of a logical add (or) of a predicate of an XPath into a state transition". the amendment being supported, for example, at paragraph 0135.

"replacement of a logical NOT (not) of a predicate of an XPath into a state transition", the amendment being supported, for example, at paragraph 0136.

"wherein said search state includes two states of said input query expression concurrently in a state transition", the amendment being supported, for example, at paragraph 0113.

"wherein every axis regarding sibling relationship among nodes can be included in the search condition for said query automaton", the amendment being supported, for example, at paragraph 0113.

"wherein the information obtained from said left node and information obtained from said lower node for a state transition is used concurrently", the amendment being supported, for example, at paragraph 0113.

"wherein node data stored until then is cleared after said evaluating", the amendment being supported, for example, at paragraph 0122;

"storing the output of the query automaton evaluator in a storage device" the amendment being supported, for example, at paragraph 0117.

Present Invention

The present invention relates to a method for searching documents (0098). The present invention includes a query automaton evaluator which generates a search result after reading a document (0098). The method includes document-searching using a compiling method (0137) for generating an automaton for enabling a state transition by storing an input query expression, performing parsing, and reading at least two states from different types of nodes in an element identifier, and a storage device for storing the two-state input automaton (0098, 0099, 0102, 0120).

35 U.S.C. 102 objection

Claim 22 was rejected under 35 U.S.C. 102(b) as being anticipated by "Efficient Filtering of XML Documents for Selective Dissemination of Information", International Conference on Very Large Data Bases, 2000 by Altinel, Mehmet, and Franklin, Michael J. (hereinafter Altinel). As claim 22 was canceled, applicant requests that this objection be withdrawn.

Altinel

Claims 1, 3-4, 6, 10, 11, 14-15, and 18-20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Altinel further in view of "XML Path Language (XPATH) 2.0", W3C Working Draft 16 August 2002, by W3C (hereinafter W3C).

Altinel teaches search algorithms for filtering XML documents (first page, first paragraph). Altinel describes techniques and examines their performance (first page, first paragraph).

While Altinel mentions searching user profiles (section 2.1, last paragraph), Altinel does not suggest an arrangement provided in the present invention that defines a search state with two states of an input included concurrently in a state transition. Therefore Altinel does not perform the step of "wherein said search state includes two states of said input query expression concurrently in a state transition", as in claims 4 and 14.

Further, while Altinel describes a precondition in the evaluation of a path node, (section 5.1, paragraph 3), Altinel does not suggest or describe whereby a single search condition may include every axis regarding sibling relationship among nodes. Therefore, Altinel fails to describe the step "wherein every axis regarding sibling relationship among nodes can be included in the search condition for said query automaton" as in claims 4 and 14.

Altinel in view of W3C

W3C, "XML Path Language (XPATH) 2.0", W3C Working Draft 16 August 2002, by W3C", teaches a language for accessing parts of XML documents, XPath 2.0 (first page). XPath operates on logical structures of XML documents (first page).

While W3C describes node testing (section 3.2.1.2), W3C does not suggest an arrangement provided in the present invention that defines a search state with two states of an input included concurrently in a state transition. Therefore, Altinel in view of W3C does not perform the step of "wherein said

search state includes two states of said input query expression concurrently in a state transition", as in claims 4 and 14.

Further, while W3C describes various axes for traversing documents, (section 3.2.1.1), W3C does not suggest or describe whereby a single search condition may include every axis regarding sibling relationship among nodes. Therefore, Altinel in view of W3C fails to describe the step "wherein every axis regarding sibling relationship among nodes can be included in the search condition for said query automaton" as in claims 4 and 14.

Therefore, Altinel in view of W3C do not teach or make obvious the combination of the above amended claims.

CONCLUSION

Reconsideration and withdrawal of the Office Action with respect to Claims 4, 6, 14, and 15 is requested. Applicants submit that the claims are now in condition for allowance or at least in better form for appeal.

In the event the examiner wishes to discuss any aspect of this response, please contact the attorney at the telephone number identified below.

☒ The Commissioner is hereby authorized to charge payment of the following fees with this communication or credit any overpayment to Deposit Account No. 09-0441:

☒ Any filing fees under 37 CFR 1.16 for the presentation of extra claims.

Respectfully submitted,

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